

~~THIS IS A REF ID: A670~~
**ROCKY FLATS PLANT
EMD OPERATING
PROCEDURES MANUAL**

Manual No.: 5-21000-OPS-SW
Procedure No.: Table of Contents, Rev 7
Page: 1 of 2
Effective Date: 09/30/92
Organization: Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:

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VOLUME II: GROUNDWATER (GW)
VOLUME III: GEOTECHNICAL (GT)
VOLUME IV: SURFACE WATER (SW)
VOLUME V: ECOLOGY (EE)
VOLUME VI: AIR (AP)

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DCN 92.02	Clarification of Sampling	2	09/29/92
SW.07	Collection of Tap Water Samples	2	05/12/92

ADMIN RECORD

REVIEWED FOR CLASSIFICATION/UCR:

By

Date

DOCUMENT CLASSIFICATION REVIEW WAIVER
PER R.B. HOFFMAN, CLASSIFICATION OFFICE
JUNE 11, 1991

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SW.10	Event-Related Surface Water Sampling	1	02/20/92
SW.11	Operation and Maintenance of Stream-Gaging and Sampling Stations	1	02/20/92
SW.12	Site Description	2	05/12/92
DCN 92.01	Reduction in Unrequired Quality Check	2	07/21/92
SW.13	Bacteriological Water Sampling	2	05/12/92
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SW.15	River and Ditch Sampling	2	05/12/92
SW.16	Sampling of Incidental Waters	2	05/12/92
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SW.28	Field Locating Effluent Pathways and Drains	0	09/25/92
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SW.33	Dye Testing Foundation Footing Drains	0	09/29/92

FIELD LOCATING CHEMICALS OF CONCERN

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Effective Date: 9/25/92
CATEGORY 2 Organization: SWD

TITLE:
FIELD LOCATING
CHEMICALS OF CONCERN

Approved By:

George H. Setlock 9/25/92
Director, Environmental Protection Dept. Date

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Date *[Signature]*

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1. PURPOSE

The purpose of this procedure is to provide instructions for performing a Chemicals of Concern (COC) identification inspection as part of the Drain Identification Study (DIS) to ensure that unacceptable amounts of hazardous or otherwise inappropriate substances at Rocky Flats Plant (RFP) cannot inadvertently enter the Sanitary Sewer (SS) system.

2. SCOPE

This procedure implements the requirements of the Drain and Effluent Pathway Assessment Criteria established by the Surface Water Division (SWD) of Environmental Management EG&G, RFP.

This procedure addresses inspection within the walls of every existing structure at RFP to locate, identify, and document on log sheets Chemicals of Concern.

This procedure address activities for the drain identification study, project #986685.

3. REFERENCES

3.1 Primary References

- 3.1.1 SWD Chemicals of Concern List
- 3.1.2 DIS Field Log Books
- 3.1.3 DIS Reference Book
- 3.1.4 EG&G Health & Safety Practices Manual, Section 2.08
- 3.1.5 RFP Standard SX-164
- 3.1.6 RFP Training Users Manual 1-10000-TUM

3.2 Secondary References

- 3.2.1 NPDES FFCA Implementation plan

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- 3.2.2 3-21000-ADM-17.01, Quality Records Management
- 3.2.3 Health & Safety Practices Manual, Section 2.08
- 3.2.4 DEPARTMENT OF ENERGY (DOE) ORDERS:
 - a. Doe Order 5480.4 Environmental Protection, Safety and Health Protection Standards
 - b. Doe Order 6430.1A General Design Criteria
 - ° Section 1300-8 Special Facilities - Waste Management
 - ° Section 1300-9 Special Facilities - Effluent Control and Monitoring
 - ° Section 1323-5 Special Facilities - Radioactive Liquid Waste Facilities
- 3.2.5 ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS:
 - a. 40 CFR 122 National Pollution Discharge Elimination System Permit Regulations
 - b. 40 CFR 131 Procedures for Approving State Water Quality Standards
- 3.2.6 COLORADO WATER QUALITY CONTROL ACT:
 - a. CRS 35-8 Colorado Water Quality Control Act
 - b. 5 CCR 1002 - Regulations for the State Discharge Permit System
- 3.2.7 Conduct of Engineering Manual Section 6.7
- 3.2.8 Conduct of Engineering Manual DES-19
- 3.2.9 Conduct of Engineering Manual DES-68A

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4. LIMITATIONS AND PRECAUTIONS

- 4.1 Personnel shall consider (including review of the material safety data sheets for unfamiliar chemicals) the potential hazards of all chemicals and waste materials in the area of inspection and not put themselves or others at undue risk.

5. PREREQUISITES

- 5.1 Personnel shall be current on all training required, per the Training Users Manual, 1-10000-TUM, to perform the tasks described in this procedure.
- 5.2 Personnel shall be aware of and perform all requirements (i.e., Work Permits, Plan of the Day, appropriate notification, etc.) prior to entering a building or area.

6. INSTRUCTIONS

6.1 Materials

- 6.1.1 Remove the Chemicals of Concern Log Sheets (Appendix 1), Secondary Containment Log Sheets, and corresponding Background Layouts from the DIS Field Log Book and replace that section with a sign out sheet (see Appendix 3)

6.2 Inspect Rooms for Chemicals of Concern

NOTE

If a room is locked or requires security escort, then note the situation on the COC Log Sheet under comments and establish entry at another time.

NOTE

If a room requires protective cloths, breathing air or is off limits because of excessive danger, then entry need not be pursued. The room is to be declared a Potential Hazard and the situation is to be noted on the COC Log Sheet under comments.

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- 6.2.1 Examine each room for the presents of products or materials, labeled or unlabeled, in liquid or fine powder form (chemicals), and/or storage and conveyance equipment (devices) that may contain or may have contained products or materials in liquid or fine powder form.
- 6.2.1.1 If no chemicals, and/or devices are present in the room, then document as such on the COC Log Sheet.
- 6.2.1.2 If unlabeled chemicals, and/or devices are present, then document the visual appearance (color, etc), location and container size on the COC Log Sheet.
- 6.2.1.3 If labeled chemicals and/or devices are present, then compare labeled materials and primary container sizes to the SWD COC list.
- a. If chemicals present are on the SWD COC list and the container exceeds the SWD limit, then list the product, the primary container (type and size), and secondary containment (when present), on the COC Log Sheet.

NOTE

COC in stationary containers, containers large enough to require mechanical assistance to transport (forklift, dolly, truck, crane, etc.), and some Satellite Collection Areas, are required to have secondary containment (Pits, burms, walls, etc). This secondary containment shall be inspected (See Section 6.4)

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- b. If more than three chemicals on the SWD COC List are present in the room, but none of the container exceed the SWD limit, then based on the SWD Limit and primary containment size, determine the three (3) most potentially hazardous products or chemicals and document them on the COC Log Sheet and include a general comment as to the balance of chemicals in the room or condition of the area under the comments section of the COC Log Sheet.
- c. If chemicals are present in the room, that are not on the SWD COC List, but your experienced judgement detects a potential problem, then record the general situation (e.g., house keeping, general types and amount of chemicals, etc.) under the comments section of the COC Log Sheet.

6.3 Investigate Transporting and Usage

NOTE

When a COC source is discovered, then the transportation and usage must be investigated.

- 6.3.1 Establish communication with the parties responsible for the COC (workers, managers, etc.) to determine the source, purpose, usage, storage, conveyance and route of transportation used associated with the COC.
- 6.3.2 Walk the transportation route (this includes tracing pipe lines transporting a COC) from it's source, to it's conclusion, documenting each room with potential to exceed an SWD COC limit, as a Potential Hazard Area (PHA) on the COC Log Sheet and clearly marking the route on a Building Background Layout (Floor Plan).

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6.4 Inspect Secondary Containment

NOTE

Secondary containment need only be investigated if a COC is located in a fixed container, the container is large enough to require mechanical assistance to transport (forklift, dolly, truck, crane, etc.), or is a Satellite Collection Area requiring secondary containment.

6.4.1 Inspect primary containment area for secondary containment.

6.4.1.1 If secondary containment does not exist, then document the COC, the primary container size and type, and put an x or a check in the "No!" column of the Secondary Containment Log Sheet (Appendix 2)

6.4.2 Document the room(s), chemical, primary containment, and visual observations in the appropriate columns on the Secondary Containment Log Sheet, and indicate the general area of the secondary containment on the background layout.

6.4.3 Inspect secondary containment area for effluent pathways (drains, cracks, etc.).

6.4.3.1 Document all effluent pathways present within the secondary containment.

a. Note on the Secondary Containment Log Sheet, the kind and amount of each type of effluent pathway present and indicate the general location on a Building Background Layout (Floor Plan) using the appropriate symbols (Appendix 4).

6.4.4 Sign and date all marked up Background Layouts and sign the COC and Secondary Containment Log Sheets.

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6.5 Review Documents

- 6.5.1 Review all field generated documents (COC Log Sheets, Secondary Containment Log Sheets, and background layouts) for clarity, consistency and completeness.
- 6.5.2 Field verify areas to clarify documentation if necessary.
- 6.5.3 Revise or reconstruct field generated documents (log sheets and background layouts) for clarity, neatness, and consistency in symbols (See Appendix 4) if necessary.

NOTE

If original field generated documents have been reconstructed, then the signed and dated originals must be filed in the DIS document file.

6.6 Finalize Documents

- 6.6.1 Ensure that all original and reconstructed marked up Background Layouts and the Log Sheets have been signed and dated.
- 6.6.2 Make copies of the COC and Secondary Containment Log Sheets and Background Layouts finish drafts.
- 6.6.3 File the finish drafts under the appropriate section of the DIS Master Log Book and place the copies in the appropriate Field Log Book.
- 6.6.4 Mark an X under COC, on the Status Check List, in the Field Log Book and remove the sign out sheet (See Appendix 3).

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7. RECORDS

All

The log sheets and background layouts are quality records and the originals shall be submitted to the EMD Records Center per 3-21000-ADM-17.01, Quality Records Management, for inclusion in the DIS Master Log Book.

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APPENDIX 1

Chemicals of Concern (COC) Log Sheets

CHEMICALS OF CONCERN (COC)
LOG SHEET

[illegible]

INSPECTED BY:

Dated

Signed

INSPECTED BY:

dated

Signed

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Dated

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APPENDIX 3
Sign Out Sheet

FIELD LOG BOOK

SIGN OUT SHEET

Name _____

Date _____

Building _____

Log Sheets _____

Drawings _____

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APPENDIX 4
Symbols, Terms and Definitions

Symbols

DRAWING AND LOG SHEET
SYMBOL LEGEND

SYMBOL

SS	Sanitary Sewer Drain
PW	Process Waste Drain
FD	Floor Drain
SH	Shower
SU	Sump
TR	Trench
UT	Utility Trench
U/L	Unlabeled Drain
WWA	Wet Work Area
o	Approx. Drain location
	Secondary Containment

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APPENDIX 5 (Continued)
Symbols, Terms and Definitions

TERMS & DEFINITIONS

Effective Secondary Containment - A wall or barrier constructed or installed to contain or restrict effluent from the area of primary containment (Tank(s) or Container(s)) that is 100% of Primary Containment or 100% of the largest Primary Containment, shows no signs of defect or compromise, and has an adequate capture area.

Effluent Pathways - Any labeled or unlabeled access to the Sanitary Sewer, Process Waste, or Foundation Drain Systems (e.g., All trenches, floor penetrations, cracks, pipe runs, expansion joints, etc.).